Employees' entrepreneurial contributions to firms in Russia, 1995-2004

Abstract

This article examines how employee self-reported entrepreneurial contributions evolved in firms operating in Russia in the period 1995-2004 and whether changes can be explained by Akerlof's (1982) theory of labour contracts as partial gift exchange. Data from the Russian Longitudinal Monitoring Survey are used to show that these contributions were indeed influenced by wage premia and shifting work norms, declining by about a half during the period. There was a particularly marked fall among contributions by manual workers. The trend was found among foreign-owned firms as well as private Russian-owned companies. The sharp decline in contributions from 'cadres' is particularly significant in view of these workers' historic importance in Russian enterprises. Akerlof's model therefore helps explain Russian workers' changing behaviour.

Key words: employee entrepreneurship, implicit gift exchange, labour contracts, Russia, transition

JEL classification: D02, D03, J24, J33

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1 Introduction

This article investigates the evolution of entrepreneurial contributions made by employees of firms operating in Russia between 1995 and 2004. These contributions may be characterised by the phrase 'going the extra mile' **or, in Whitley's (1999) conceptualisation, by non-contractual 'employee contributions to organisational capacities'; we discuss the concept in more detail below**. Their incidence appear likely to reflect shifts in how Russian employees related to their employment. The subject is significant since it reveals the effectiveness or otherwise of approaches to labour management in unlocking employee contributions, an explicit aim of HRM. In particular, it allows us to examine how far if at all foreign-owned firms have been able to introduce specific labour management practices which more effectively unlock these contributions.

Employee entrepreneurial contributions, it has been argued, are important drivers of organisational success and profitability (Thornberry, 2001), strategic renewal (Zahra, 1996), and organisational change (Kuratko et al., 2005). They have been at the centre of an important trend in HRM, 'High Performance Works Systems', which are grounded in the argument that previously withheld employee contributions may be unlocked to establish competitive advantage (see for example, Appelbaum et al., 2000). Indeed, a central aim of HRM has been to seek 'commitment not compliance' from workforces, where a key component of commitment is a willingness to make higher contributions to organisational success (see for example, Walton, 1985; Boxall and Purcell, 2003). Foreign-owned companies in Russia are familiar with such ideas, but how far they have been able to put them in practice in that national context is unclear (Domsch and Lidokhover, 2007).

Researchers have asserted the importance of managers supporting in-enterprise entrepreneurship across all hierarchical levels and occupations in order to improve a firm's performance and increase its competitive advantage (Kuratko et al., 2005; Mair, 2005; Zampetakis et al., 2009). The few works on corporate entrepreneurship in transition economies (for example, Filatotchev et al., 1992; Kaufman et al., 1995; Filatotchev et al., 1999) focus predominantly on corporate governance issues and the role of managers in restructuring former state-owned organisations. Yet Western managers, when compared to non-managerial employees, have been shown to respond quite differently to incentives to perform in these ways (Kinnie et al., 2005). A handful of studies analyse employee entrepreneurship within organisations in market economies (for example, Mair, 2005; Zhao et al., 2005; Zampetakis et al., 2009). As far as we have been able to ascertain, no research has been published on the wider and significant issue of the entrepreneurial contributions made by non-managerial employees in the transition context.

The article is structured as follows. We first develop an analytical framework applicable to the Russian context, deriving two hypotheses. These are tested by using the large-scale Russian Longitudinal Monitoring Survey (RLMS) data in 1995 and ten years later, in 2004. Finally, we discuss our econometric results and draw conclusions.

2 Analytical framework

2.1 Employee entrepreneurial contributions and implicit gift exchange

We first delineate and describe the forms of contributions under discussion and then introduce Akerlof's (1982) implicit gift exchange model of labour contracts.

Entrepreneurial activities have been seen by researchers as diffuse and difficult to define. As Hornsby et al. (2002) point out there is therefore little agreement regarding the specific actions that constitute entrepreneurial behaviour in intra-organisational contexts. **At**

the lowest level, they may include but cannot be defined simply by the extent of working time, as would be shown for example by a propensity to work overtime. Not only does this fail to capture the full range of discretionary employee contributions, it may in the Russian context simply reflect managerial pressure. The various conceptualizations are often associated with discrete events such as the creation of new organisations, new entry or new product development (for example, Covin and Slevin, 1991; Lumpkin and Dess, 1996; Endres and Woods, 2006). For employees of Russian organisations, especially those lower down organisational hierarchies, the larger scale activities encompassed within these latter definitions seem likely to be inappropriate, given the strongly hierarchical nature of these companies and the low-trust relations within them. **Pearce et al.'s (1997) entrepreneurial behaviour model allows both large-scale and more day-to-day possibilities, since it encompasses strategic vision, creation of an energetic working environment, change of orientation and the ability to 'cut red tape'. In other international conceptualisations, positive employee contributions along these lines include a preparedness to share information and knowledge both tacit and explicit, which may in turn generate innovation within the organisation (Ekvall, 1996; Gooderham et al., 2010).**

Mair (2005) offers a description that is more likely to characterise what is involved when generating a conceptualization of 'day to day' entrepreneurship appropriate to Russia. Individuals can become entrepreneurial, for instance, in the ways they cooperate with their colleagues, in the ways they organize their daily work tasks, or in the ways they meet challenges from work organisation, top management or customers (Mair, 2005). Within this view, individual entrepreneurial behaviour may therefore be modest in scope and encompasses a spectrum of activities ranging from independent/autonomous to integrative/cooperative behaviours; the overall aim is to generate new ways of getting things done. They may therefore be envisaged as non-strategic activities and practices which

nevertheless lead to value creation for the organisation. These are the types of input envisaged when the 'entrepreneurial' term is used here.

As we demonstrate below when discussing the current state of labour management, the 'HRM' paradigm is ill-suited to analysis of the Russian context since strong continuities with the Soviet past persist. Therefore, we prefer a more fundamental paradigm focussing directly on the employment relationship itself – Akerlof's (1982) implicit gift exchange model of labour contracts. Norms are highly significant within Akerlof's model, which makes it particularly appropriate in the Russian context. In our framework, important factors such as changes in ownership and work norms, argued by Soulsby and Clark (2007) to be essential in analysing transition contexts, are explicitly incorporated.

In Akerlof's theory, the firm's gift to the worker (in return for the worker's non-contractual gifts to the firm) consists in large part of a wage that is fair; the term can be equated to the industrial relations term 'felt fair', since it is in part normative. Using reference-individual-reference-group theory, Akerlof argues that the perceived fairness of wages depends on how other individuals in the employee's reference set are treated.[1] The key component of the perceived fairness of the wage will be the remuneration received by other similar individuals, both employed and unemployed.[2] The 'fair' wage received by the employee depends on perceptions of the entrepreneurship he/she contributes according to and in excess of the work rules, the wages of other employees, the work rules themselves and the benefits of unemployed individuals. While empirically unemployment at any moment encompasses a fairly small fraction of the labour force, flows in and out of unemployment are large. In the Russian transition context, the probability that a whole reference set will be free of unemployment for a significant period is small; **there is a very large 'grey' or 'informal' labour market (Clarke, 2009)**. In brief, the framework proposes that extra contributions will be extracted from employees when a credible implicit gift exchange relationship can be

established with them. We therefore hypothesise: *employee entrepreneurial activity is positively associated with the 'fair' wage premium* (Hypothesis 1).

If the hypothesis is upheld, this may mean that foreign-owned companies, which frequently attempt to establish competitive advantage in the Russian labour market by paying premium wages (Domsch and Lidokhover, 2007), may enjoy higher levels of reported entrepreneurial activity than their Russian counterparts. Since they also tend to have equal opportunities policies (*ibid*) we might further expect that these could have a motivational effect on female employees, causing them to raise their entrepreneurial contributions.

2.2 The Russian 'transition' and the evolution of work norms

Literature suggests that discretionary employee inputs are most likely to be stimulated in corporate environments with high levels of shared decision-taking and trust between managers and owners on the one hand and employees and managers on the other, and similar levels of worker team participation (for a review see Chang, 2000). A further characteristic of this type of corporate environment is that corporate policy emphasises intrinsic rather than extrinsic employee rewards (Birkinshaw, 2010). Thirdly, and largely as a consequence of the first two characteristics, high levels of 'social capital' are developed that encourage the development of trust throughout the corporation, building knowledge, information sharing and internal innovation (Minbaeva et al., 2003). On the other hand, strongly bureaucratic or hierarchical corporate cultures have been shown to operate in the opposite direction, stifling discretionary contributions (Gooderham et al., 2010). Negative conditions are therefore most likely to be found in Russian enterprises that are, or have recently been, state-owned. Private companies, and especially foreign-owned MNCs, are more likely to foster more positive climates.

It appears unlikely that any of the positive conditions identified above have been enhanced in Russia during our period of analysis. First, high levels of distrust, both between owners and managers and between managers and employees, have been widely emphasised as a problem in Russian firms, in turn hampering the development of labour management more broadly throughout the period (Frydman et al., 1996; Blasi et al., 1997; Morrison, 2007). Second, Russian managers favour the use of extrinsic rewards and in particular payment-by-results systems, continuing late Soviet practice. Third, both cause and consequence of the previous point, levels of manager-employee trust tends to be low (Domsch and Lidokhover, 2007).

Thus, Russian political and economic transition is likely to have affected the work norms incorporated in Akerlof's model and **both limited and** defined the extent of the employee-employer 'gift' exchange relationship. How this situation developed is therefore an important question.

During the late Soviet era, because of ideological disillusionment, extrinsic rewards were perceived as more influential than intrinsic ones in motivating Russian workers (Welsh et al., 1993). However, the scope of reward and punishment was generally limited due to the worsening economic and political situation (Ivancevich et al., 1992). In the absence of formal extrinsic rewards and faced by a joint need to achieve external targets, workers and managers engaged in a 'favour for favour' exchange process (Hermann, 1994; Shershneva and Feldhoff, 1998). The strong implicit gift exchange in pre-transition labour relations was combined with a distorted price of labour (the 'fair' wage) and the policy of full employment. The overall result was weakened incentives and norms leading to low employee motivation and low levels of employee contributions, as Akerlof's (1982) model (p. 566, equation 37) predicts (see also Kornai, 1992).

. **Our period of study, the decade beginning in the mid-1990s, certainly saw major shifts in labour market conditions. At the beginning of the period, voucher privatisation nominally providing employees with an ownership stake in companies (although vouchers moved rapidly out of most employee hands) was in practice complete (Morrison, 2007). This may have raised expectations of increased employee involvement, improving worker incentives and shifting them towards more uniform norms of higher employee effort and entrepreneurship in privatised organisations (McCarthy et al., 1993; McCarthy et al., 1997). The second half of the last decade saw a change of hands with new private financial-industrial groups taking over much of industry. During Putin's rule the consolidation of ownership in the hands of oligarchs through 'Nomenklatura privatisation' alienated and disillusioned workers, as many had lost their company ownership stake and suffered from wage arrears (Freeland, 2000; Sonin, 2003). This was a significant aspect of 'state-controlled democracy' as Kuchins (2006) described it. By the end of the period, a new Russian Labour Code (coming into effect in early 2002) was embedded in practice (Bronstein, 2005). The Code *inter alia* greatly reduced unions' statutory role in influencing employers' dismissal decisions (Burnham et al., 2004).While the code contained some clauses that were relatively protective of workers in international terms, this has to be seen against the background of widespread non-observance of all laws and enforcement agencies relating to the employment relationship (Ashwin and Clarke, 2003; Royle, 2005). There is also the persistence, across our period of analysis and beyond, of wage arrears in both the private and public ('budgetary' in Russian parlance) sectors despite the fact that they represent a fundamental and unlawful breach of the employment relationship. Thus, the period appears likely to have been one in which initial hopes of an environment more conducive to stimulating discretionary employee inputs may not have been**

realised in practice (Domsch and Lidokhover, 2007). Relations within organisations started to depart from the implicit gift exchange behaviours characteristic of our framework (Linz and Semykina, 2008; Rutkowski, 2006).

A number of in-depth studies document workers' disillusionment with working life as transition proceeded (Siegelbaum, 2004; Morrison, 2007; Clarke, 2009). Workers' increasingly felt that their job security and prospects were worsening (Linz and Semykina, 2008). Lower level managers themselves became increasingly resistant to owners' and more senior managers' initiatives (Johnson, 1997). Demoralisation was particularly evident in certain strata. Men at the bottom end of the labour market were one such stratum (Ashwin and Lytkina, 2004). Banai and Reisel (2007) show that workers in companies with concentrated private ownership had often lost their previous jobs in state owned companies and, besides experiencing a devastating personal event, also lost many welfare benefits traditionally provided by those companies. Consequently, private companies' workers may have been even more alienated than state (or former state) owned companies' workers.

Foreign-owned companies (mostly MNCs), which have become increasingly important to the Russian economy, might theoretically have been able to resist or overcome such effects by their HRM policies and practices. Yet how far they have brought HRM approaches with them is unclear since these are only weakly established in Russia even at the rhetorical level (Domsch and Lidokhover, 2007). These companies clearly interact with host countries' institutional frameworks to produce 'hybrid' sets of practices and to transpose Western companies' management models to 'transitional' environments. In transition countries these may be viewed both as advanced practices which local managers need to learn from and as offering some progress to those adopting them in the foreign-owned companies' internal labour market (Meardi and Toth, 2006). Nevertheless, local environments exercise influence over foreign-owned companies' practices and companies' portrayal of these as

home-country driven cannot be accepted at face value (Doerrenbaecher, 2002). In the Russian context, where the balance of power in the employment relationship is strongly weighted towards employers, institutions are weak and there are no pressures to 'Europeanize' it seems likely that senior foreign managements may simply allow labour management to be determined by local managers (Croucher and Cotton, 2009). Wider practices beyond comparatively high pay may come closely to resemble those of comparable host country private (or privatised) companies and 'demonstration effects' from foreign owned to domestic companies may be very limited.

Although developments might have brought the Russian labour market closer to the neoclassical model where firms never choose to pay more than the market clearing wage, Akerlof's model would still explain the presence of wage premia were implicit gift exchange relations in place. Given prevailing work norms, some firms may find it advantageous to pay a wage premium because there are some benefits to paying a higher wage. Then the labour market would be characterised by heterogeneity through segmentation into primary and secondary, and transitory unemployment. Such a framework seems to correspond well to the Russian situation.

In summary, until the mid 1990s when voucher privatisation was widespread the incentives for employee entrepreneurship were relatively strong; after 1995, when Prime Minister Chubais endorsed the 'loan for shares', and especially after 2000, during President Putin's rule, the concentration of private ownership in the oligarchy may have increased workers' sense of alienation and therefore a likely decline in employee entrepreneurship. The norms that play such a central role in Akerlof's model appear likely to have shifted considerably away from thrust-based nurturing implicit gift exchange industrial relations. We therefore hypothesise: *The share of workers in-enterprise entrepreneurial contributions declined between 1995 and 2004* (Hypothesis 2).

3 Econometric framework and data

Theoretically, the differential between the market (predicted) wage and the individual (actual) 'fair' wage as defined above will influence employee contributions, and will identify those who are likely to work harder and be more entrepreneurial in their jobs.[3] We econometrically test this theoretical proposition (Hypothesis 1) in two stages. In the first, we estimate the 'fair' wage premia, which are at the core of our analytical framework, and then, in the second stage, we estimate the effects of the wage premium and other factors affecting employee entrepreneurial behaviour and effort. The dependent variable in the second-stage - entrepreneurial contribution - is measured by self-reported involvement in entrepreneurial activity **as encapsulated in our survey data described below**.

In the first stage, we estimate the difference between the actual ('fair') and the estimated (market) wage for each individual in our sample by applying a Heckman selection model to a Mincerian wage equation (Heckman, 1974). We control for selection into employment in this way when estimating the magnitude of the wage rate as a function of individual characteristics such as age, education, gender, occupation, and ethnicity (Russians vs. non-Russians). Thus, we include in the estimated sample both employed and unemployed individuals in the labour force. The approach reflects the assumption that the reference group for each individual in the sample comprises all other similar individuals. Implicitly, we also assume that individuals have homogenous expectations. To account for regional differences we include regional (*oblast*) dummies in the specification, capturing characteristics such as unemployment, prices, and inflation levels; the rate of unemployment benefits is determined at national level and is essentially uniform across regions. The predicted wage takes the characteristics of all individuals in the reference set and the wages paid to them as well as the impact of regional rates of unemployment and, indirectly, the extent of unemployment

benefits into account. The main identifying variables in the employment selection equation of the Heckman model are, as common in the literature, the level of non-labour income and individual and household characteristics such as marital status and numbers of children in the household.

In the second stage of our analysis we focus on employee entrepreneurial contributions. The 'fair' wage premium constitutes the main explanatory variable, as defined in Akerlof (1982; p.561, equation 14). The norms at any given point in time are exogenous to the firm and largely depend on the returns to other individuals in the employees' reference sets as well as on institutions. Over time, as we argued above, norms are likely to have evolved in Russia. Factors related to the changes in ownership and organisation (for example, the privatisation of state-owned enterprises and the arrival of MNCs) partially affecting employees' entrepreneurial contributions correspond to what Zampetakis et al. (2009) call perceived organisational support (POS). Such factors include the firm's work rules, the average wage paid by the firm and the firm's incentive system in terms of the different wages paid for different levels of output or effort. We use information on wage arrears as a proxy for the system of wage (dis)incentives in the firm. We also control for any explicit employee firm ownership stake, employee characteristics such as tenure and occupation, firm size, and type of firm ownership (state, private and foreign). Most such variables are endogenous to the corporate organisation and have been changing over time, thus, affecting norms (Hypothesis 2). Finally, in the second stage specification we also include regional dummy variables to control for geographical variation in institutions and the heterogeneity of the transition process.

For our econometric analysis we employ data from the Russian Longitudinal Monitoring Survey (RLMS) spanning the ten-year period between 1995 (round 5) and 2004 (round 13). The RLMS is a nationally representative survey of individuals and households

which samples the population of dwelling units annually.[4] The data include a wide range of information concerning individual and household characteristics such as demographics, education, labour force participation, occupation, time allocation, wages and other incomes. Importantly, data on adult individuals also include detailed information about the enterprise where each individual is employed and characteristics of employment relations such as employees' role in the enterprise, wage arrears, enterprise ownership, and the number of employees in the firm. Our sample consists of all adult individuals of working age - 16 to 65 years - who were surveyed in the 1994/1995 and 2004 - rounds 5 and 13 respectively - as the samples are representative for each period.[5] When referring to different categories of employees in the data, the terms we use are as follows. The 'Managers' category includes individuals holding medium or higher level management positions in an enterprise. The 'Professionals' category includes lower level categories such as nurses as well as those, like lawyers and teachers, more often associated with the term. The 'Blue collar' category covers skilled technical and clerical workers and includes many described as 'cadres' in Russia. The 'Manual workers' category comprises those employed in semi- and unskilled work.

The main dependent variable is self-reported involvement in entrepreneurial activity. We use a question from the survey in which individuals are simply asked if they feel they are performing entrepreneurial activities in their workplace:

> *"Как Вы считаете, на этой работе Вы занимаетесь предпринимательской деятельностью?" ("Do you feel that you are doing entrepreneurial activities in this job?")*

Clearly, the measure we use is one that reflects respondents' subjective perceptions, allowing them to define for themselves what constitutes entrepreneurial activity. Much of this has historically been socially modelled by 'cadres' (Arnot, 1988, Morrison, 2007). While it is difficult to define the type of activity involved with any great precision, it

seems likely to encompass at least some of the activities indicated in our delineation in previous sections and to capture at least some elements of their discretionary contributions or lack of them.

4 Econometric results

Table 1 presents definitions and summary statistics for all the regression variables used in our econometric analysis by year. Overall, the distributions of the main individual demographic characteristics at the two sampling points appear similar and to have remained unchanged while the size of the estimated samples increased slightly, from 2,437 to 2,889 observations. We find a significant decline in the employee entrepreneurship rate (*Entrepreneur*) – the main dependent variable in our analysis - from 8.1 to 4.7 percent over the ten-year period. This is accompanied by a similarly significant decline in the 'fair' wage premia (*WagePremia*) and the explicit firm ownership stake held by employees.

Comparing summary statistics for two groups of explanatory variables over time - individual and household characteristics, and determinants of employee entrepreneurial contributions - we can see from the individual and household characteristics affecting the 'fair' wage premium, that the proportion of individuals with only primary school education has declined by 8 percentage points while the proportion of those with high school education has increased by 6 percentage points. The university-educated proportion of the labour force has also increased, by 2 percentage points. The proportions of different occupational categories have also changed significantly. The proportion of managers has more than doubled while the proportion of professionals has slightly decreased. The decline in the proportion of manual workers with low skill levels (labourers), over the ten-year period, by more than 5 percentage points, is significant, while the proportion of blue collar occupations has increased by about the same percentage. There is a relatively significant decrease in non-

labour income and in the number of adolescent children in households over the ten-year period.

Among the determinants of employee entrepreneurial contributions, besides the significant decline in the 'fair' wage premia and in the proportion of employees owning an explicit firm ownership stake, there are also significant changes in the proportions of firm ownership categories. The proportion of state owned firms has declined significantly, by almost twenty percentage points, while the proportion of privately owned firms has increased by about the same percentage. Foreign-owned firms do not seem to have increased over the ten-year period and their proportion has remained almost constant at about 3.4-3.8 percent. In our sample, the average firm size has declined, as has the incidence of wage arrears. A decline in average job tenure may be taken as evidence of higher labour market turnover – a characteristic of an increasingly active labour market. Overall, it is evident that important changes in the variables influencing work norms and thus, theoretically, entrepreneurial contributions have occurred over the ten-year period.

The results from estimating the wage equation with the Heckman model are reported in table 2. In all regressions the explanatory variables are jointly statistically significant at 1 percent. In the selection equation, the probability of employment is highest for middle aged, university educated men. In 1995, individuals seeking managerial employment are less likely to be employed while ten years later professionals and blue collar workers are more likely to be employed. Employment opportunities are significantly lower outside the Moscow and St. Petersburg metropolitan areas. In the wage equation, the wages of younger to middle aged university educated men are highest, with managerial, professional and blue collar occupations all commanding higher wages than manual workers. Wages in regions outside the Moscow-St. Petersburg metropolitan areas are consistently lower and the gap seems to have widened over the ten-year period.

In the second stage of our analysis we estimate the total samples in the 1995 and 2004 survey rounds and subsamples by occupation and gender for each year. In terms of the subsamples by occupation, because of the small sample size and their relative similarity, we group manual and blue collar occupations in one subsample and professional and managerial occupations in another. Table 3 contains tabulations of the rate of entrepreneurship (*Entrepreneur*) by four categories of occupation and two gender categories, by year, and reveals significant heterogeneity in the rate of employee entrepreneurship and the changes over the ten-year period across occupations and gender. The rate of employee entrepreneurship is strikingly low in manual worker occupations and only slightly higher in the blue collar occupations. Professional occupations are also characterised by a low rate of employee entrepreneurship, while, unsurprisingly, entrepreneurship is significantly higher for managerial occupations. The changes over time are remarkable. The drop in employee entrepreneurship is highest for manual workers - almost 65 percent -and is similarly high for blue collar occupations. For professional and especially for managerial occupations the drop is smaller – about 50 and 35 percent, respectively. There is a significant difference in the rates of decline in employee entrepreneurship when gender is considered; the decline for male employees is almost 55 percent while that for female employees is less than 40 percent.

Results from estimating the probability of employee entrepreneurship – the focus of our analysis - are reported in table 4 and table 5. In all regressions the explanatory variables are jointly statistically significant at 1 percent. In table 4, the impact of the 'fair' wage premia is positive and statistically significant even when we control for an explicit employee ownership stake, as this latter effect is also positive and significant in all specifications. It is interesting to consider effects in two subsamples. The first comprises managers and professionals and the second consists of blue collar and manual workers. The positive effect of the 'fair' wage premium is stronger in the second subsample in 1995, while in 2004 it

becomes more important in the first subsample. Tenure and wage arrears have negative and significant impacts on employee entrepreneurship in 1995 but this effect weakens and becomes insignificant in 2004. Firm size and state ownership are also negatively associated with employee entrepreneurship. Interestingly, the effect of foreign-owned firms on employee entrepreneurship does not significantly differ from the effect of private ownership by Russian entities. Regional controls suggest that incentives for employee entrepreneurship are much weaker in regions outside the Moscow-St. Petersburg metropolitan areas, as this negative association weakens over the ten-year period of analysis. In general, the magnitudes of the effects are lower in 2004 than in 1995.

The results from estimating subsamples by gender reported in table 5 are also quite interesting in several respects. The magnitudes of estimated effects in the male subsamples are, in general, larger than in the female subsamples. For female employees, it seems that tenure does not have any statistically significant effect on entrepreneurship, and in 2004 the effect of the 'fair' wage premia is also insignificant. Furthermore, in 2004, there are no statistically significant differences across most of the regions, including the Moscow-St. Petersburg metropolitan areas. The most relevant result, however, is that in foreign-owned firms women employees seem to be more entrepreneurial than their male counterparts; however, the effect weakens over the ten-year period.

5 Conclusion and discussion

The main contribution of this article has been to examine two hypotheses. The first was that entrepreneurial activity could be explained by 'fair' wage premia and this was upheld. In our framework, when employees accept the employer's gift as credible and believe that they have an implicit stake in the organisation the employee's entrepreneurial input and increased effort become the reciprocal gift to the firm. We found convincing evidence that higher wage

premia positively influence entrepreneurial contributions by men and women ordinary employees as well as by those in managerial and professional occupations. Entrepreneurial incentives remain significantly associated with the 'fair' wage premia even when we control for an employee explicit ownership stake in the firm. Thus, Akerlof's model applies to the Russian context and not only to the Western environment in which it was originally developed.

The second hypothesis was that the rate of employee entrepreneurial activity declined in the ten-year period. This was upheld for the majority of occupations, especially for employees in the lowest graded positions and male workers. Indeed, it fell considerably. The overall decline in employee entrepreneurship is accompanied by a significant reduction - also by about a half - in the 'fair' wage premia. In the context of our framework such a decline cannot solely be attributed to the increasing efficiency of the Russian labour market. In the neoclassical model the firm never chooses to pay above the market-clearing wage because there is no advantage in doing so. In Akerlof's model, however, the interior solution, in which the firm finds it advantageous to pay a wage premium, may occur because there are some benefits given prevailing norms.

The results from the analysis of subsamples by occupation and especially gender provide evidence for the labour market segmentation and heterogeneity which flows from Akerlof's model. Taken in conjunction with Ashwin and Lytkina's (2004) findings, this suggests a significant gender aspect to workers' willingness to contribute, since men appear more likely than women to have reduced their entrepreneurial activity. It may therefore be that foreign companies' emphasis on equal opportunities and developing positive cultures in relation to women may have had some effect, although this appears to have weakened over time. There is evidence of a decline in the effect of 'fair' wage premia on incentives for female workers over the ten-year period. The implicit gift exchange appears to be

decreasingly credible for manual and blue collar workers as opposed to managers and professionals since the positive effect of the 'fair' wage premia on (blue collar and manual) entrepreneurship in 2004 weakened compared to that on managers and professionals in 2004. Manual and blue collar workers had a high propensity to become unemployed, possibly adding to their reluctance to contribute.

It may have been possible for some Russian firms to create positive gift exchange relationships with employees, thereby generating entrepreneurial behaviour by them. But overall, such behaviour declined, especially among manual and blue collar workers and male workers more generally. This is consistent with other studies from very different schools of thought and using quite different methods, notably case studies (for example, Linz, 2003; Morrison, 2007; Clarke, 2009). The development is especially significant since these workers include 'cadres', skilled workers traditionally considered to have a much wider degree of initiative than their equivalents in Western Europe (Morrison, 2007). Foreign-owned firms showed the same trend as Russian-owned private firms, apparently confirming their incapacity to introduce motivational tools that would allow them to insulate themselves from the wider context. While in the case of women they were able to mitigate the wider context's impact, this effect weakened over time. These are important underlying realities for the practice of HRM in Russia.

At a theoretical level, our findings demonstrate the fluidity of employee behaviours during 'transition', suggesting that teleological 'transition' and institutionalist 'path dependence' approaches may obscure important counter-currents. Our analysis suggests that the first school's stress on linear development and the second's emphasis on institutional continuity mask important attitudinal shifts among workers.

Endnotes

[1] In Thompson's (1991) terms, this is the 'customary wage', part of the employees' 'moral economy'.

[2] Although individuals do sometimes have reference groups, or reference individuals who are dissimilar (Akerlof, 1982), in matters of fairness it appears safe to suppose along with much industrial relations literature that most persons compare themselves to persons who are *similar.*

[3] The argument is formally outlined in Akerlof (1982). If a worker with convex utility and positive marginal product for effort has a positive utility for wage income and zero disutility for added effort, the firm can increase his compensation and force him to work harder, to the advantage of both. If the worker was satisfied with his job before this additional trade, he will be even more satisfied afterwards and therefore more willing to remain at his work place to make entrepreneurial contributions.

[4] This is not a true panel survey where sample individuals and households are followed and interviewed in each round. However, after 1999 the original design was modified and some individuals and households who moved away were surveyed at their new locations. Analyses of the RLMS data for attrition, carried out by the Institute for Social Research at the University of Michigan, show that the exits can be characterized as random and that the sample distributions remain unchanged (Heeringa, 1997).

[5] Linz and Semykina (2008) use a similar RLMS sample of individuals in the labour force and estimate two cross-sections for 1995-1998 and 2000-2004 periods. We also use two cross-sections but for one year each - 1995 and 2004 - spanning a period of ten years because our goal is to capture and contrast the differences in HRM practices in Russia between early and late 'transition'.

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Table 1 Summary statistics

Variable	Definitions	1995	2004
(1)	(2)	(3)	(4)
Dependent variables			
Wage	Log of hourly wage (real 1995 new Roubles)	2.162	2.682
		(0.854)	(0.918)
Entrepreneur	Dummy variable equal to 1 if the employee performs entrepreneurial activity and 0 otherwise	0.081	0.047
		(0.272)	(0.212)
Determinants of 'fair' wage			
Age	Individual age (year)	39.38	38.77
		(10.87)	(11.28)
PrimSchool	Dummy variable equal to 1 if the individual has only completed primary school and 0 otherwise	0.264	0.201
		(0.451)	(0.401)
HighSchool	Dummy variable equal to 1 if the individual has completed high school and 0 otherwise	0.486	0.526
		(0.499)	(0.498)
University	Dummy variable equal to 1 if the individual has completed higher education and 0 otherwise	0.250	0.273
		(0.434)	(0.448)
Male	Dummy variable equal to 1 if the individual is a male and 0 otherwise	0.452	0.427
		(0.498)	(0.495)
Russian	Dummy variable equal to 1 if the individual is of Russian nationality and 0 otherwise	0.849	0.810
		(0.358)	(0.313)
Manager	Dummy variable equal to 1 if the individual is in a managerial occupation and 0 otherwise	0.017	0.047
		(0.127)	(0.212)
Professional	Dummy variable equal to 1 if the individual is in a professional occupation and 0 otherwise	0.238	0.214
		(0.426)	(0.410)
BlueCollar	Dummy variable equal to 1 if the individual is in a blue collar occupation and 0 otherwise	0.309	0.355
		(0.462)	(0.478)
Labourer	Dummy variable equal to 1 if the individual is in a manual work occupation and 0 otherwise	0.436	0.384
		(0.496)	(0.486)
Married	Dummy variable equal to 1 if the individual is married and 0 otherwise	0.773	0.769
		(0.419)	(0.444)
Children7	Log of number of children in the household age 7 years or younger	0.195	0.162
		(0.340)	(0.306)
Children16	Log of number of children in the household age 8 to 16 years	0.428	0.325
		(0.457)	(0.403)
HHSize	Log of number of adult household members	1.110	1.053
		(0.373)	(0.417)
NLIncome	Log of monthly non-labour income per household member (real 1995 new Rubbles)	7.191	5.210
		(3.275)	(4.005)

Table 1 (continued)

(1)	(2)	(3)	(4)
Determinants of employee entrepreneurship			
WagePremia	Proportional 'fair' wage premium	0.386	0.179
		(0.733)	(0.870)
OwnStake	Dummy variable equal to 1 if the employee owns	0.249	0.060
	up to 50% share in the firm and 0 otherwise	(0.433)	(0.237)
Tenure	Log of number of years working in the same firm	1.994	1.604
		(0.888)	(1.084)
Arrears	Dummy variable equal to 1 if the firm owes the	0.299	0.112
	employee wages in arrears and 0 otherwise	(0.458)	(0.316)
FirmSize	Log of total number of employees in the firm	4.784	4.504
		(2.050)	(1.990)
PrivateRussian	Dummy variable equal to 1 if the firm is owned by	0.244	0.415
	a private Russian entity and 0 otherwise	(0.429)	(0.493)
ForeignOwn	Dummy variable equal to 1 if the firm is owned by	0.034	0.038
	a foreign (private) entity and 0 otherwise	(0.181)	(0.191)
StateOwn	Dummy variable equal to 1 if the firm is owned by	0.741	0.557
	the local of central government and 0 otherwise	(0.438)	(0.497)
Regional fixed effects			
Moscow&SP	Dummy variable equal to 1 if the individual resides	0.113	0.116
	in Moscow or St. Petersburg region and 0 otherwise	(0.317)	(0.187)
North&NW	Dummy variable equal to 1 if the individual resides	0.079	0.076
	in the North or North-West region and 0 otherwise	(0.270)	(0.248)
Central	Dummy variable equal to 1 if the individual resides	0.191	0.191
	in the Central region and 0 otherwise	(0.393)	(0.393)
Volga	Dummy variable equal to 1 if the individual resides	0.166	0.176
	in the Volga region and 0 otherwise	(0.372)	(0.380)
NorthCaucasus	Dummy variable equal to 1 if the individual resides	0.128	0.123
	in the North Caucasus region and 0 otherwise	(0.334)	(0.317)
Ural	Dummy variable equal to 1 if the individual resides	0.142	0.145
	in the Ural region and 0 otherwise	(0.349)	(0.342)
WestSiberia	Dummy variable equal to 1 if the individual resides	0.093	0.086
	in the West Siberia region and 0 otherwise	(0.290)	(0.255)
EastSiberia	Dummy variable equal to 1 if the individual resides	0.088	0.077
	in the East Siberia region and 0 otherwise	(0.284)	(0.266)
Total obs.		2437	2889

Note: The summary statistics reported for each variable are mean and standard deviation (in parentheses).

Table 2 Wage equation estimated by Heckman two-stage model

Variable	1995		2004	
	Selection	**Wage**	**Selection**	**Wage**
(1)	(2)	(3)	(4)	(5)
Age	**0.050** (0.018)	**0.015** (0.009)	**0.028** (0.015)	0.017 (0.014)
Age^2x10^{-2}	**-0.057** (0.023)	**-0.023** (0.012)	**-0.036** (0.019)	0.022 (0.018)
HighSchool	0.002 (0.063)	0.054 (0.038)	0.024 (0.061)	0.046 (0.061)
University	**0.180** (0.099)	**0.388** (0.057)	**0.172** (0.081)	**0.369** (0.078)
Male	**0.192** (.0064)	**0.297** (0.036)	0.073 (0.054)	**0.253** (0.053)
Russian	0.043 (0.073)	0.014 (0.044)	0.022 (0.073)	0.088 (0.073)
Manager	**-0.325** (0.192)	**0.216** (0.125)	-0.027 (0.097)	**0.352** (0.105)
Professional	0.086 (0.100)	**0.267** (0.056)	**0.172** (0.086)	**0.308** (0.081)
BlueCollar	0.075 (0.072)	**0.133** (0.042)	**0.118** (0.062)	**0.167** (0.060)
Married	-0.010 (0.067)	-	-0.090 (0.058)	-
Children7	-0.125 (0.085)	-	**-0.154** (0.075)	-
Children18	0.102 (0.074)	-	0.049 (0.064)	-
HHSize	**0.205** (0.087)	-	**0.129** (0.067)	-
NLIncome	**-0.272** (0.068)	-	**-0.135** (0.062)	-
North&NW	-0.119 (0.128)	-0.072 (0.074)	**-0.397** (0.109)	**-0.336** (0.109)
Central	**-0.293** (0.107)	**-0.520** (0.057)	**-0.182** (0.085)	**-0.584** (0.079)
Volga	**-0.426** (0.108)	**-0.791** (0.059)	**-0.287** (0.087)	**-0.821** (0.080)
NorthCaucasus	**-0.533** (0.119)	**-0.738** (0.066)	**-0.234** (0.096)	**-0.664** (0.090)
Ural	**-0.222** (0.115)	**-0.373** (0.061)	**-0.167** (0.089)	**-0.552** (0.082)
WestSiberia	**-0.244** (0.122)	**-0.210** (0.068)	**-0.371** (0.107)	**-0.920** (0.105)
EastSiberia	**-0.579** (0.121)	**-0.166** (0.069)	**-0.705** (0.091)	**-0.830** (0.097)
WaldChi2(16)	673.93		495.73	
Total obs.	4347		4955	
Uncensored obs.	3170		4115	

Note: Coefficients in **bold** are significant at the 10 percent level or better and represent marginal effects. Standard errors are reported in parentheses next to the coefficients.

Table 3 Rate of entrepreneurship (*Entrepreneur*) by occupation and year

Occupation	**Manual**	**Blue collar**	**Professional**	**Managers**	**Male**	**Female**
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1995	4.97	11.79	7.72	52.38	10.43	6.12
2004	1.81	4.48	3.70	34.13	4.70	3.88
Change, %	-63.6	-62.0	-52.1	-34.8	-54.9	-36.6

Table 4 Probit estimates of determinants of employee entrepreneurship, by occupation

Variable	1995			2004		
	Total	**Man&Prof**	**Blue&Lab**	**Total**	**Man&Prof**	**Blue&Lab**
(1)	(2)	(3)	(4)	(5)	(6)	(7)
WagePremia	**0.014**	0.010	**0.015**	**0.009**	**0.013**	0.005
	(0.004)	(0.010)	(0.005)	(0.003)	(0.007)	(0.003)
OwnStake	**0.059**	**0.103**	**0.042**	**0.066**	**0.094**	**0.038**
	(0.009)	(0.021)	(0.010)	(0.010)	(0.026)	(0.010)
Tenure	**-0.017**	**-0.032**	**-0.011**	-0.003	-0.004	-0.002
	(0.005)	(0.010)	(0.005)	(0.002)	(0.006)	(0.002)
Arrears	**-0.017**	-0.016	**-0.015**	-0.006	-0.014	-0.015
	(0.009)	(0.016)	(0.008)	(0.009)	(0.012)	(0.012)
FirmSize	**-0.017**	**-0.015**	**-0.018**	**-0.009**	**-0.009**	**-0.008**
	(0.002)	(0.005)	(0.003)	(0.002)	(0.003)	(0.002)
ForeignOwn	-0.003	-0.026	0.023	-0.007	-0.013	0.013
	(0.019)	(0.021)	(0.029)	(0.015)	(0.015)	(0.019)
StateOwn	**-0.100**	**-0.076**	**-0.101**	**-0.035**	**-0.095**	**-0.025**
	(0.015)	(0.032)	(0.017)	(0.007)	(0.028)	(0.007)
North&NW	-0.019	-0.007	-0.011	-0.004	0.011	-0.006
	(0.011)	(0.032)	(0.014)	(0.008)	(0.028)	(0.009)
Central	**-0.032**	**-0.043**	**-0.024**	-0.007	0.001	-0.007
	(0.008)	(0.016)	(0.011)	(0.006)	(0.016)	(0.007)
Volga	**-0.019**	-0.014	-0.016	0.001	**0.035**	-0.008
	(0.009)	(0.021)	(0.012)	(0.007)	(0.026)	(0.006)
NorthCaucasus	**-0.023**	-0.028	-0.016	-0.008	-0.014	-0.004
	(0.009)	(0.017)	(0.012)	(0.006)	(0.013)	(0.008)
Ural	**-0.028**	**-0.043**	-0.016	0.002	-0.009	0.008
	(0.009)	(0.013)	(0.013)	(0.008)	(0.014)	(0.010)
WestSiberia	**-0.030**	**-0.038**	-0.023	**-0.012**	0.007	**-0.014**
	(0.009)	(0.013)	(0.012)	(0.005)	(0.030)	(0.005)
EastSiberia	**-0.022**	-0.030	-0.015	**-0.015**	-0.015	**-0.016**
	(0.010)	(0.017)	(0.013)	(0.005)	(0.012)	(0.006)
LRChi2(14)	327.46	117.08	230.42	294.15	222.92	200.91
Total obs.	2437	629	1808	2889	757	2132

Note: Coefficients in **bold** are significant at the 10 percent level or better and represent marginal effects. Standard errors are reported in parentheses below the coefficients.

Table 5 Probit estimates of determinants of employee entrepreneurship, by gender

Variable	1995			2004		
	Total	**Male**	**Female**	**Total**	**Male**	**Female**
(1)	(2)	(3)	(4)	(5)	(6)	(7)
WagePremia	**0.014**	**0.017**	**0.012**	**0.009**	**0.010**	0.006
	(0.004)	(0.007)	(0.006)	(0.003)	(0.004)	(0.005)
OwnStake	**0.059**	**0.095**	**0.062**	**0.066**	**0.262**	**0.164**
	(0.009)	(0.022)	(0.020)	(0.010)	(0.061)	(0.050)
Tenure	**-0.017**	**-0.026**	-0.008	-0.003	**-0.006**	-0.001
	(0.005)	(0.008)	(0.006)	(0.002)	(0.003)	(0.003)
Arrears	**-0.017**	**-0.022**	-0.013	-0.006	-0.001	-0.015
	(0.009)	(0.012)	(0.010)	(0.009)	(0.010)	(0.015)
FirmSize	**-0.017**	**-0.021**	**-0.015**	**-0.009**	**-0.008**	**-0.008**
	(0.002)	(0.004)	(0.003)	(0.002)	(0.002)	(0.002)
ForeignOwn	-0.003	-0.037	**0.052**	-0.007	-0.020	0.001
	(0.019)	(0.017)	(0.031)	(0.015)	(0.022)	(0.018)
StateOwn	**-0.100**	**-0.110**	**-0.076**	**-0.035**	**-0.038**	**-0.033**
	(0.015)	(0.022)	(0.019)	(0.007)	(0.010)	(0.010)
North&NW	-0.019	**-0.036**	-0.002	-0.004	0.001	-0.011
	(0.011)	(0.015)	(0.018)	(0.008)	(0.012)	(0.009)
Central	**-0.032**	**-0.051**	**-0.015**	-0.007	0.001	-0.010
	(0.008)	(0.014)	(0.012)	(0.006)	(0.009)	(0.008)
Volga	**-0.019**	-0.023	-0.014	0.001	-0.001	0.002
	(0.009)	(0.018)	(0.013)	(0.007)	(0.009)	(0.010)
NorthCaucasus	**-0.023**	**-0.044**	-0.007	-0.008	-0.005	-0.010
	(0.009)	(0.013)	(0.015)	(0.006)	(0.008)	(0.008)
Ural	**-0.028**	**-0.044**	-0.012	0.002	0.003	0.004
	(0.009)	(0.014)	(0.014)	(0.008)	(0.011)	(0.011)
WestSiberia	**-0.030**	**-0.044**	-0.017	**-0.012**	-0.013	-0.010
	(0.009)	(0.013)	(0.013)	(0.005)	(0.009)	(0.009)
EastSiberia	**-0.022**	**-0.038**	-0.003	**-0.015**	-0.010	**-0.017**
	(0.010)	(0.014)	(0.016)	(0.005)	(0.007)	(0.006)
LRChi2(14)	327.46	200.99	128.95	294.15	187.23	119.69
Total obs.	2437	1108	1329	2889	1237	1652

Note: Coefficients in **bold** are significant at the 10 percent level or better and represent marginal effects. Standard errors are reported in parentheses below the coefficients.